

Two new species of Epilamprinae from Vietnam and Cambodia (Dictyoptera, Blattina: Blaberidae)

L.N. Anisyutkin

Anisyutkin, L.N. 2005. Two new species of Epilamprinae from Vietnam and Cambodia (Dictyoptera, Blattina: Blaberidae). *Zoosystematica Rossica*, **14**(1): 37-40.

Rhabdoblatta belokobylskii sp. n. and *Pseudophorasaspis doroshenkoi* sp. n. are described from Vietnam and Cambodia, respectively.

L.N. Anisyutkin, Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St.Petersburg 199034, Russia. E-mail: orthopt@zin.ru

Two new species of Epilamprinae are described based on the collection of Zoological Institute, Russian Academy of Sciences (ZIN). The types of new species and all the material examined are deposited at ZIN. For the male genitalia, the author follows the terminology of Grandcolas (1996).

Family **BLABERIDAE** Brunner von Wattenwyl, 1865

Subfamily **EPILAMPRINAE** Brunner von Wattenwyl, 1865

Genus **Rhabdoblatta** Kirby, 1903

Rhabdoblatta belokobylskii sp. n.
(Figs 1-5, 7-12)

Holotype. ♂, **Vietnam**, prov. Hoa Binh, distr. Yen Thuy, Lac Thinh, 20°23'N, 105°34'E, 300 m, 1-2.V.2002 (S.A. Belokobylskij).

Paratypes. **Vietnam**: 1 ♀, prov. Gia Lai, 40 km N of Kannack, Tram Lap, 11-14.IV.1995 (A.V. Gorochov); 1 ♀, prov. Ha Son Binh, Cuc Phung Nature Reserve, 15.X.1994 (I.S. Darevsky).

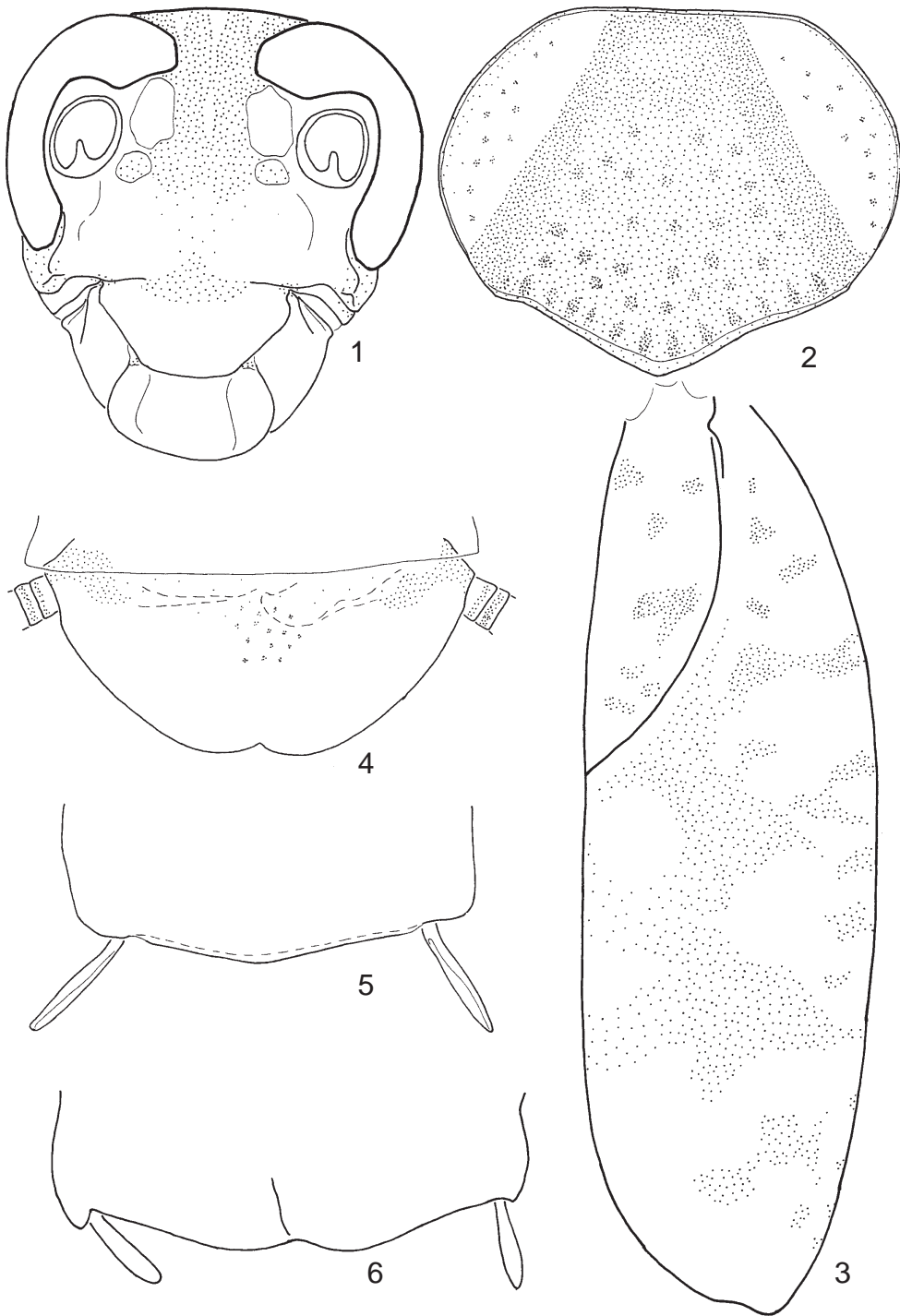
Description. *Male* (holotype). Comparatively large. All surfaces smooth; upper part of head, pronotum and tegmina (mainly in proximal parts) with weak, nearly indistinct punctation. General coloration yellowish brown with scattered black spots. Head yellowish; vertex, frons between eyes and antennal pits and transverse stripe above clypeus nearly black; vertex with indistinct longitudinal brownish stripes; eyes brown; genae slightly darkened; mouthparts yellowish brown (Fig. 1). Antennae yellowish brown, about first 17-19 segments shining, following dull. Pronotum yellowish brown, with small scattered blackish dots and oblique lateral stripes subhyaline

(Fig. 2). Tegmina yellowish brown with scattered dark brown spots, apically subhyaline (Fig. 3); wings more uniformly yellowish, with weak brownish spots only at costal margin, anal area subhyaline. Legs yellowish brown, anterior (morphologically upper) margin of femora, outer and proximal parts of tibiae, distal parts of tarsomeres more or less darkened. Abdomen brownish yellow, with a pair of black spots on 1st-6th tergites and 2nd-6th sternites. Cerci dark brown.

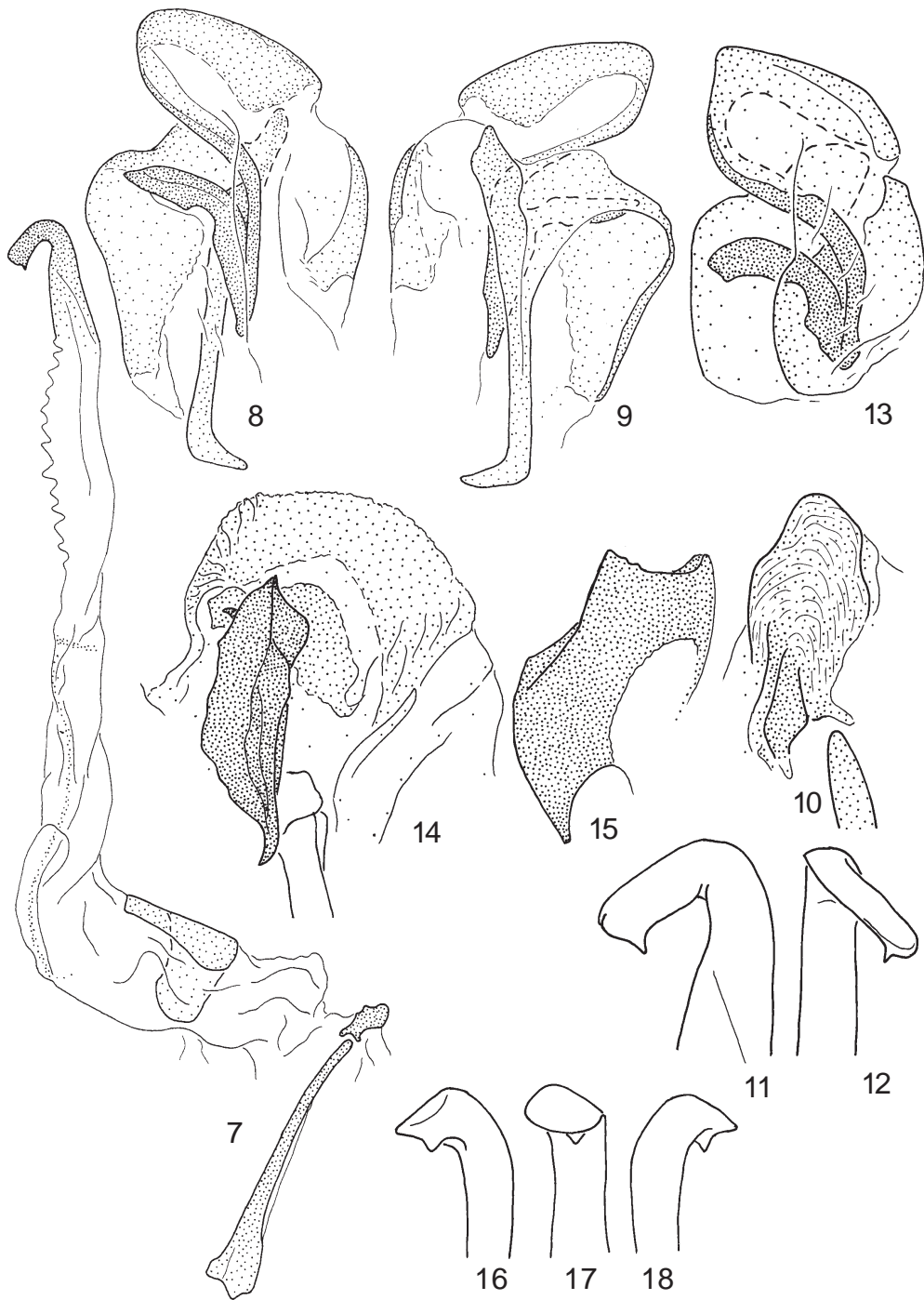
Head with distance between eyes subequal to that between ocellar spots (Fig. 1); interval between antennal sockets about 1.4 times the length of scapus. Pronotum subpentagonal (Fig. 2). Fore femora with 2 apical spines, 8 spines of different sizes on anteroventral margin and a row of setae between the apical spines and spines on anteroventral margin. Anal plate (X tergite) rounded (Fig. 4), with weak emargination on caudal margin. Hypandrium nearly symmetrical (Fig. 5), with caudal margin weakly projected; styli somewhat flat.

Male genitalia (Figs 7-12). Apical sclerite of complex L1 well sclerotized, with very fine streaking on distal part of sclerite (Fig. 10); basal part of L1 rod-like, strongly sclerotized, in-cassate proximally (Fig. 7). Complex of sclerites L2 elongated, with accessory sclerite (L3d) and folded structure on membranous sac of L2d (Fig. 7); apex of L2d well sclerotized (Figs 11, 12), apical ridge almost absent, any armament on inner part of hook absent, apical tooth present. Complex of sclerites R+N well sclerotized, with shape of sclerites as in Figs 8, 9.

Female. Similar to male in general appearance, but slightly larger; brown spots on tegmina less numerous and better defined; anal plate more rounded.



Figs 1-6. Males. **1-5**, *Rhabdoblatta belokobylskii* sp. n. (holotype); **6**, *Pseudophoraspis doroshenkoi* sp. n. (holotype). Head in frontal view (1); pronotum (2), right tegmen (3) and abdominal apex (4) from above; hypandrium from below (5, 6). Dotted area shows dark colour, dotted lines in Fig. 4 show the outlines of paraprocts.



Figs 7-18. Male genitalia. 7-12, *Rhabdoblatta belokobylskii* sp. n. (holotype); 13-18, *Pseudophoraspis doroshenkoi* sp. n. (holotype). Complexes of L2 and L1 of the male genitalia with sclerite L2d in completely everted position (7); complex of R+N, from above (8, 13) and from below (9); apical sclerite of complex L1 from above (10, 14); apical outgrowth of sclerite L1 from side (15); apical part of sclerite L2d (11, 12, 16-18). Dotted area shows sclerotized parts.

Variation. Female from Gia Lai Prov. paler, with spots on tegmina few in number and dark elements of coloration on facial part of head nearly indistinct. Interval between antennal sockets about 1.2-1.4 times the length of scapus. Fore femur with 2 apical spines and 7-10 spines on anteroventral margin.

Length (mm): head ♂ 6.5, ♀ 6.6-7.3; pronotum ♂ 10.5, ♀ 10.6-12.4; tegmen ♂ 49, ♀ 49 to more than 53 (in the specimen from Cuc Phung Reserve tegmina are broken off apically). Width (mm): head ♂ 5.9, ♀ 6.2-6.8; pronotum ♂ 13.2, ♀ 14-16.9.

Comparison. The new species is similar to *Rh. adjacens* Anisyutkin, 2000 in the coloration of tegmina and to *Rh. orlovi* Anisyutkin, 2000 in the coloration of the facial part of head, but readily differs from *Rh. adjacens* in the coloration of pronotum and from *Rh. orlovi*, in the shape of sclerite L2 of the male genitalia. The shape of sclerite L2 of *Rh. belokobylskii* is somewhat similar to that of *Rh. simulans* Anisyutkin, 2000, but these species differ in the coloration. The new species belongs to the *elegans* species group (Anisyutkin, 2003).

Genus **Pseudophoraspis** Kirby, 1903

Pseudophoraspis doroshenkoi sp. n. (Figs 6, 13-18)

Holotype. ♂, **Cambodia**, northern part of Elefan Mts., Kiri-Rom National Park (150 km NNE of Sihanoukville), 600-800 m, 7-10.X.2003 (A. Gorochov, M. Berezin).

Paratypes. 2 ♀, with same data as in holotype.

Description. **Male** (holotype). All surfaces smooth; tegmina in proximal halves distinctly punctate. General coloration yellowish brown; eyes black; about first 13-14 antennal segments shining, following dull; pronotum, tegmina, wings near costal margin, and abdominal sternites with small scattered dark spots.

Head typical of genus, with impression between eyes; distance between eyes about 0.6 times that between ocellar spots; distance between antennal sockets about 1.5 times the length of scapus. Pronotum subpentagonal. Fore femora with 2 apical spines, 4-5 spines on anteroventral margin and a row of setae between the apical spines and spines on anteroventral margin. Anal plate (X tergite) rounded, with well visible emargination on caudal margin. Hypandrium nearly symmetrical (Fig. 6), with small elevated ridge in the middle of widely emarginated and weakly

projected caudal margin; styli comparatively small and flat.

Male genitalia (Figs 13-18). Apical sclerite of complex L1 (Fig. 14) with fine streaking on distal part of sclerite, with large and strongly sclerotized dorsal outgrowth (Fig. 15); basal part of L1 rod-like, incrassate proximally. Complex of sclerites L2 elongated, with accessory sclerite (L3d) and folded structure on membranous sac of L2d; apex of L2d well sclerotized, apical ridge virtually absent, apical tooth present (Figs 16-18). Complex of sclerites R+N well sclerotized (Fig. 13); sclerite R3v comparatively short.

Female. Similar to male in general appearance, but slightly more robust and convex. Head with distance between eyes subequal to distance between ocellar spots; interval between antennal sockets about 1.8 times the length of scapus. Fore femora with 1-2 apical spines.

Length (mm): head ♂ 5.1, ♀ 5.7; pronotum ♂ 9.9, ♀ 10.7; tegmen ♂ 33, ♀ 32. Width (mm): head ♂ 4.7, ♀ 5-5.2; pronotum ♂ 12.9, ♀ 14.4-14.9.

Comparison. *P. doroshenkoi* sp. n. is most similar to *P. argillacea* Anisyutkin, 1999 and *P. truncatulus* Anisyutkin, 1999 in the presence of a large, strongly sclerotized dorsal outgrowth of sclerite L1 of the male genitalia (Anisyutkin, 1999), but differs in the more convex body and, especially, in the shape of apical sclerite of complex L1.

Acknowledgements

The author express his sincere thanks to N. Doroshenko, M. Berezin and A. Gorochov for their help in field work in Cambodia. The study was supported by the Russian Foundation for Basic Research (grant no. 04-04-48189) and programme of Praesidium of Russian Academy of Sciences: "Origin and Evolution of Biosphere". The collection of Zoological Institute, St.Petersburg, is supported by the Russian Federal Agency for Science and Innovations (state contract no. 02.452.12.7111).

References

- Anisyutkin, L.N.** 1999. Cockroaches of the subfamily Epilamprinae (Dictyoptera, Blaberidae) of Indochina. *Entomol. Obozrenie*, **78**(3): 565-588. (In Russian).
- Anisyutkin, L.N.** 2003. New and little known cockroaches of the genus *Rhabdoblatta* Kirby (Dictyoptera, Blaberidae) from Vietnam and Southern China. II. *Entomol. Obozrenie*, **82**(3): 609-628. (In Russian).
- Grandcolas, P.** 1996. The phylogeny of cockroach families: a cladistic appraisal of morpho-anatomical data. *Can. J. Zool.*, **74**: 508-527.

Received 11 April 2005